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(54) Title: NOVEL POLYMERS

$$H = \begin{bmatrix} R^6 & R^7 \\ | & | \\ | & | \\ C - C \\ | & | \\ R^8 & R^9 \end{bmatrix} \stackrel{O}{\vdash} CHR^{\dagger}CHR - P \stackrel{C}{\vdash} C \stackrel{R^2}{\vdash} \stackrel{R^3}{\vdash} \stackrel{I}{\vdash} \qquad (I)$$

$$OX \qquad OX$$

(57) Abstract: A polymer of formula (I) wherein: R and R' are each independently selected from hydrogen, a hydroxyl group, a carboxyl group, an alkyl, aryl or alkaryl group or a hydroxy - or carboxy substituted - alkyl, aryl or alkaryl group provided that R and R' together have a total of less than 23 carbon atoms and n is greater than 1; X is hydrogen or a cation or an alkyl group; one of R², R³, R⁴, R⁵ is a phosphonate or a sulphonate group and the remainder of R², R³, R⁴, R⁵ are each independently selected from hydrogen, alkyl, aryl, alkaryl, alkoxy, hydroxy, hydroxy or carboxy substituted alkyl, phosphonate or sulphonate groups and a is from 1 to 5; R⁶, R⁷, R⁸, R⁹ are each independently selected from hydrogen, alkyl, aryl, alkaryl, hydroxy, alkoxy, hydroxy or carboxy substituted alkyl or carboxy groups and b is from 5 to 200. The polymer has uses in the fields of water treatment and corrosion inhibition.